



Features

- Maximum height of 1.60 mm
- Current up to 3.2 A
- RoHS compliant*

Applications

- Input/output of DC/DC converters
- Power supplies for:
 - Portable communication equipment
 - Camcorders
 - LCD TVs
 - Car radios

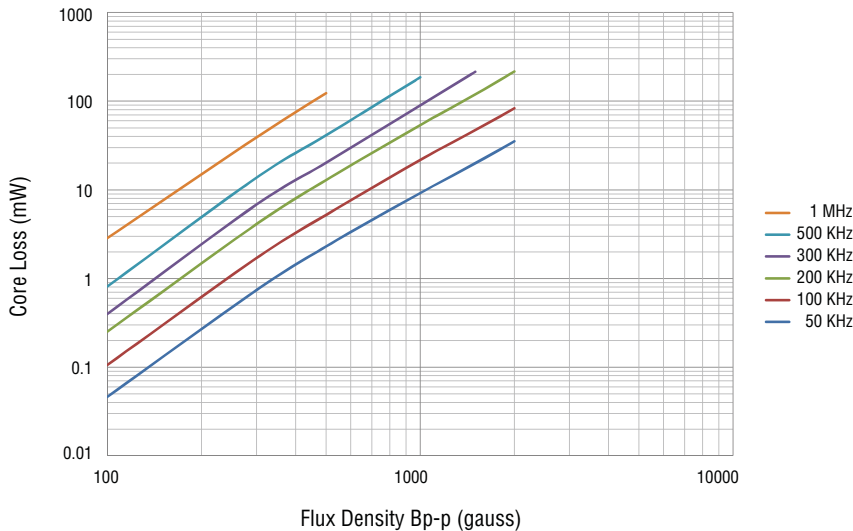
SRU6013 Series - Shielded SMD Power Inductors

Electrical Specifications

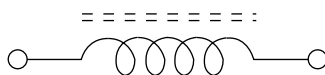
Bourns Part Number	Inductance @ 100 KHz		Q Ref.	Test Freq. (MHz)	SRF Typ. (MHz)	RDC Max. (mΩ)	I rms Max. (A)	I sat Typ. (A)	**K- Factor
	L (μH)	Tol. (%)							
SRU6013-1R0Y	1.0	±30	12	7.96	100	36	3.20	2.90	453
SRU6013-1R5Y	1.5	±30	10	7.96	90	40	3.00	2.40	370
SRU6013-2R2Y	2.2	±30	10	7.96	80	50	2.50	2.10	313
SRU6013-3R3Y	3.3	±30	10	7.96	70	60	2.35	1.75	272
SRU6013-4R2Y	4.2	±30	10	7.96	55	75	2.10	1.50	214
SRU6013-6R4Y	6.4	±30	10	7.96	45	110	1.70	1.30	177
SRU6013-100Y	10	±30	14	2.52	35	165	1.40	1.00	151
SRU6013-150Y	15	±30	12	2.52	26	235	1.10	0.80	116
SRU6013-220Y	22	±30	12	2.52	22	325	0.95	0.72	99
SRU6013-330Y	33	±30	10	2.52	18	500	0.78	0.58	77
SRU6013-470Y	47	±30	10	2.52	14	675	0.66	0.50	65
SRU6013-680Y	68	±30	10	2.52	10	900	0.60	0.40	57

**K-Factor: To calculate core flux density, Bp-p (gauss) = K x L(μH) x Δ I (peak-to-peak ripple current, A), determine core loss from Core Loss vs. Flux Density plot.

Core Loss vs. Flux Density



Electrical Schematic



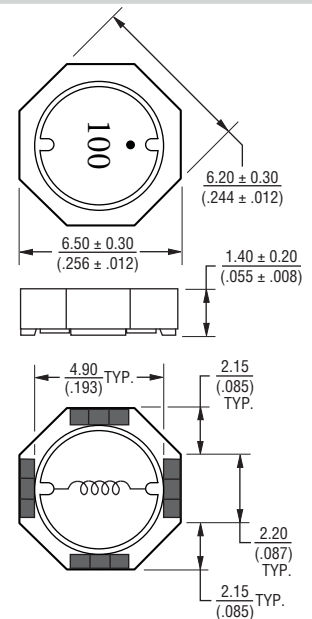
General Specifications

Test Voltage.....0.1 V
 Reflow Soldering .. 230 °C, 50 sec. max.
 Operating Temp.-40 °C to +125 °C
 (Temperature rise included)
 Storage Temp.-40 °C to +125 °C
 Resistance to Soldering Heat
 260 °C for 10 sec.

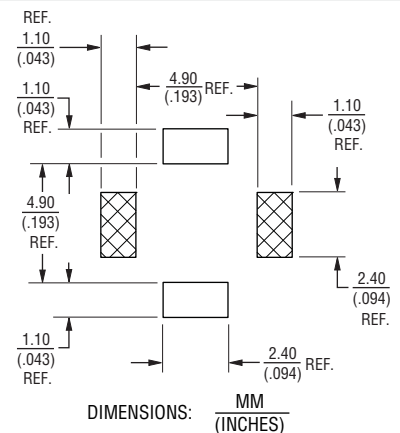
Materials

Core.....Ferrite DR and RI core
 WireEnamelled copper
 Terminal.....Ag/Ni/Sn
 Rated Current..Ind. drop 35 % typ. at Isat
 Temp. Rise.....40 °C max. at rated I rms
 Packaging.....1000 pcs. per reel

Product Dimensions



Recommended Layout



* RoHS Directive 2002/95/EC Jan. 27, 2003 including annex and RoHS Recast 2011/65/EU June 8, 2011.
 Specifications are subject to change without notice.
 The device characteristics and parameters in this data sheet can and do vary in different applications and actual device performance may vary over time.
 Users should verify actual device performance in their specific applications.

BOURNS®

Technical drawing of a 100 ohm 1/4 watt resistor, showing end view, side view, and top view with dimensions and labels.

End View Dimensions:

- Overall Diameter: 17.8 ± 0.5 (7.008) DIA.
- Inner Diameter: 2.0 ± 0.5 (.079 $\pm$.020)
- Inner Diameter: 13.0 ± 0.5 (.512 $\pm$.020) DIA.
- Inner Diameter: 21.0 ± 0.8 (.827 $\pm$.031)

Side View Dimensions:

- Overall Width: 18.4 (.724)
- Width: 13.0 ± 0.5 (.512 $\pm$.020) DIA.
- Width: 50.0 (1.969)
- Width: 14 (.551)

Top View Dimensions and Labels:

- COVER TAPE
- EMBOSSED CAVITY
- EMBOSSED CARRIER
- Width: 12.0 (.472)

Bottom View Dimensions and Labels:

- END
- START
- NO COMPONENT 200 (7.874)
- COMPONENTS
- NO COMPONENT 400 (15.748)
- Width: 8 (.315)
- Width: 4 (.157)

Dimensions: MM (INCHES)

USER DIRECTION OF FEED →

QTY: 1,000 PCS. PER REEL

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